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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/804,147

03/19/2004

Roberto Neri

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EXAMINER

LAWRENCE JR, FRANK M

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/804,147

Applicant(s)

NERI, ROBERTO

Examiner

Frank M. Lawrence

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date (4).
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: In the last line of the abstract, “[Fig. 1]” should be deleted. In line 2 of claim 8, “zone” should be changed to “portion” to avoid indefiniteness.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13 and 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 is vague because it is unclear how the radial dimensions of the union zones are both the same size and of a greater size than the radial dimensions of the seal zones. Claim 21 is indefinite because it is unclear how a “degree” of curvature can be compared to the lateral dimension of the membrane. It appears that “degree” should be changed to “diameter” to be consistent with the specification. Claims 22-24 are rejected for depending from a rejected parent claim.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-4, 6, 8, 10-18, 20-29, 35, 36 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by the European patent application (EP 0536297 B1).
6. EP '297 teaches a membrane filter for removing bacteria and viruses from a fluid, comprising a first end portion (14) with a first tubular connector (18), a second end portion with a second tubular connector, a third plate-shaped intermediate portion (40, 42, 46) between the end portions, two serially-facing filter membranes (30, 60) between the end portions and intermediate portion, reliefs (26) defined in surfaces of the end portions and intermediate portion defining striker surfaces for the membranes, and coaxial union zones uniting the portions, rounded seal zones at the perimeters of the membranes, wherein the filter unit maybe have a round, square, or rectangular shape (see figures, page 3, line 12 to page 4, line 26). The end portions and intermediate portion form an internal cavity when compressed and threaded together.
7. Claims 20-34 are rejected under 35 U.S.C. 102(b) as being anticipated by the UK patent application (GB 2168263).
8. GB '263 teaches a filter for protecting medical devices, comprising a hollow body including a first portion (1) with a first tubular connector (2), a second portion (5) with a second tubular connector (5), and a membrane (4) in a cavity formed by the portions, wherein the portions and membrane are square-shaped with an annular seal zone between the portions that is also square-shaped with rounded corners (see figures, page 1, lines 45-52, page 2, lines 1-24).
9. Claims 1, 3, 4, 6 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by the German reference (DE 19816871 A1).

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10. DE '871 teaches a filter for protecting a medical device, comprising a hollow body including a first end portion with a first tubular connector (3), a second end portion with a second tubular connector (4), a third intermediate portion (5) defining a cavity between the end portions, and two serially facing membranes (6, 7) sealed between the end portions and intermediate portion with coaxial annular union zones (see figures).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5, 7 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP '297 in view of Myers (6,168,653).

13. EP '297 discloses all of the limitations of the claims except that the intermediate portion is molded of plastic and that the union zones are subjected to ultrasonic welding. Myers '653 discloses a membrane housing for medical uses, having molded plastic parts that are ultrasonically welded under pressure (col. 1, lines 4-12, col. 2, lines 41-62). It would have been obvious to one having ordinary skill in the art at the time of the invention to use molded plastic parts and ultrasonic welding in order to provide a completely sealed unit that is simple and inexpensive to manufacture.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP '297 in view of Stankowski (5,269,917).

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15. EP '297 discloses all of the limitations of the claim except that the reliefs are ribs arranged tangentially and communicating with a central zone by means of radial channels defined by the reliefs. Stankowski '917 discloses a membrane housing having a striker surfaces defined by a plurality of tangential reliefs (19, 21) that define radial channels that communicate with a central zone (see figures, abstract). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of EP '297 by including the striker surfaces of Stankowski '917 in order to provide a means for evenly distributing a gas flow over the entire surface of the membrane while supporting the membrane.

16. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP '297 in view of GB '263.

17. EP '297 discloses all of the limitations of the claim except that the seal zones have rounded corners. GB '263 discloses a membrane housing as described in paragraph 8 above. It would have been obvious to one having ordinary skill in the art at the time of the invention to use rounded corners in the seal zone in order to provide structural integrity and potential problems associated with material accumulation that would occur in sharp corners.

### ***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose membrane filters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence  
Primary Examiner  
Art Unit 1724

*Frank Lawrence*

4-27-06

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